

# GIS SKILLS: SELF-ASSESSMENT

Your Name: \_\_\_\_\_

Date: \_\_\_\_\_

For each item below, rate your level of experience and/or understanding by marking the corresponding box with an 'X'. Use the following guidelines:

**0: No experience** = "I have never done this" or "I don't even know what this is."

**1: Novice** = "I have done this only once or twice in a GIS class" or "I have heard of this, but have only a vague understanding of the concept."

**2: Intermediate** = "I have done this several times and could do it again, but still need some guidance to be confident that I am doing it correctly" or "I could explain the basic concept to a classmate, but am fuzzy on some of the details."

**3: Proficient** = "I can do this without guidance, although I might sometimes need to refer to the help documentation or get some help from other sources" or "I could teach a class on this if I had some time to prepare."

**4: Expert** = "I could do this in my sleep" or "I could teach a class on this right now."

Be as honest as possible. It is fine if you don't have any experience in some areas – that's what internships are for! This assessment will help us assign internship tasks appropriate for individual skillsets.

GIS Skills	0 No Exp.	1 Novice	2 Intermediate	3 Proficient	4 Expert
Overall GIS Skills (considering all components below)					
<b>Mapping</b>					
Understand the elements distinguishing a true map from a simple graphic					
Edit existing map layout to include new data, modify the symbology, change the scale, etc.					
Create an effective, aesthetically pleasing map layout from scratch					
Understand absolute versus relative paths to map data sources					
<b>Coordinate Systems</b>					
Understand coordinate systems, datums, and projections					
Reproject vector data					
Reproject raster data with correct resampling options					
<b>Metadata</b>					
Examine metadata to gain more understanding of a spatial dataset					
Document datasets with clear metadata					
<b>Data Management</b>					
Establish and follow logical naming conventions					
Establish and follow file organization, maintenance, and backup strategies					

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<b>Vector Data</b>					
Heads-up digitizing: create new shapes					
Heads-up digitizing: edit existing shapes					
Understand and enforce topology rules when editing shapes					
Perform basic operations such as clipping, buffering, and intersecting					
Perform spatial and tabular joins					
Design selection queries (alone or in sequence) to isolate desired features with specific spatial and/or tabular attributes					
Edit tabular attributes					
Add new attribute fields					
Follow specifications to create a new shapefile or feature class from scratch					
Merge multiple vector data sources into a single seamless feature class or shapefile					
<b>Raster Data</b>					
Convert vector data to raster with correct specifications					
Reclassify a raster					
Perform neighborhood operations (e.g., focal statistics)					
Perform zonal operations (e.g., zonal statistics)					
Perform map algebra operations					
Create a Euclidean distance raster					
Perform cost distance analysis					
Perform terrain analysis					
Perform image classification					
Combine multiple rasters to create a seamless data layer; understand difference between “raster dataset”, “raster catalog”, and “mosaic dataset” in ArcGIS terminology					
<b>Process Automation</b>					
Use ArcGIS ModelBuilder to string together several geoprocessing steps in sequence					
Edit existing Python script tools and their underlying scripts					
Create new Python script tools and underlying scripts with multiple geoprocessing steps, loops, if/then statements, etc.					
Modify custom tools to be readily understood and employed by outside users					

**Comments (optional):**